

**Flood Control Project Maintenance
Levee Inspections**

Fall 2013 Levee Maintenance Deficiency Summary Report

Overall LMA & Unit Ratings, including USACE Erosion Survey

Sacramento River Basin

ST0010	Overall LMA Rating	Total LMA Miles						
Sutter Maintenance Yard Wadsworth Canal	A	9.32						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Animal Control	0.02		0.02	0.22%				
Slope Stability	0.01		0.01	0.11%				
Erosion / Bank Caving	0.51		0.51	5.47%				
<i>Supplemental</i>								
USACE Erosion Survey	0.05		0.05	0.54%				
DWR UCIP Field Study					0.18	0.04		
<i>LMA Totals:</i>	0.59	0.00	0.59	6.33%	0.18	0.04	0.00	0.00
Unit No. 01 Wadsworth Canal LB	Overall Unit Rating	Total Unit Miles						
ST0010	A	4.66						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Animal Control	0.01		0.01	0.22%				
Erosion / Bank Caving	0.08		0.08	1.72%				
<i>Supplemental</i>								
USACE Erosion Survey	0.02		0.02	0.43%				
DWR UCIP Field Study					0.07	0.02		
<i>Unit Totals:</i>	0.11	0.00	0.11	2.36%	0.07	0.02	0.00	0.00
Unit No. 02 Wadsworth Canal RB	Overall Unit Rating	Total Unit Miles						
ST0010	M	4.66						
Rated Item	Maintenance Deficiency				Enforcement		Design & System Obsolescence	
	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
<i>Earthen Levee</i>								
Animal Control	0.01		0.01	0.22%				
Slope Stability	0.01		0.01	0.22%				
Erosion / Bank Caving	0.43		0.43	9.23%				
<i>Supplemental</i>								
USACE Erosion Survey	0.03		0.03	0.64%				
DWR UCIP Field Study					0.11	0.02		
<i>Unit Totals:</i>	0.48	0.00	0.48	10.30%	0.11	0.02	0.00	0.00

**Flood Control Project Maintenance
Levee Inspections**
LMA District Cover Sheet
Fall 2013 Levee Inspection Results

Sutter Maintenance Yard Wadsworth Canal

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)			A	

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

*
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports. This rating is not intended to be an indication of risk.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2013 Levee Inspection Results

Sutter Maintenance Yard Wadsworth Canal

Waterway			Bank	Unit Miles
Unit No. 01 Wadsworth Canal			Left	4.66
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			A	
Date of Inspection	04/09/2013 - 04/09/2013		10/23/2013 - 10/23/2013	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Steve Beckley Sutter Maintenance Yard		Steve Beckley Sutter Maintenance Yard	

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

Levee Inspection Report By Mile - Fall 2013

Waterway							Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal							Left	4.66	10/23/2013 10/23/2013	Bob Duffey
UMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
1			Earthen Levee	Operations & Maintenance Manuals	WS	A				10
								DWR ID: DWR_ST0010_01_s_2013_10		
2			Earthen Levee	Emergency Supplies & Equipment	WS	A				11
								DWR ID: DWR_ST0010_01_s_2013_11		
3			Earthen Levee	Flood Preparedness & Training	WS	A				12
								DWR ID: DWR_ST0010_01_s_2013_12		
4	0.00	0.00	Supplemental	DWR UCIP Field Study	WS	M	Inspector Comments: FS_ID:16729 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 5/16/2013 Unknown permit for work FIELD_STRUCT_DESC: FS Date: 8/1/2013	39.153000 ° -121.734146 °	39.153000 ° -121.734146 °	97
								DWR ID: DWR_ST0010_01_f_2013_97		
5	0.02	0.02	Supplemental	DWR UCIP Field Study	WS	M	Inspector Comments: FS_ID:6740 EP_NO: 5296 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: Need to determine disposition of pipe, contact pipe owner if possible. FIELD_STRUCT_DESC: 3-1/2-inch steel gas line through the levee, 3.0 feet below the crown. Bank rock revetted. (Permit No. 5296 - Atlantic Oil CO. 1966). FS Date: 10/9/2012 2:33:00 PM	39.113670 ° -121.768310 °	39.113670 ° -121.768310 °	98
								DWR ID: DWR_ST0010_01_f_2013_98		
6	0.02	0.02	Supplemental	DWR UCIP Field Study	WS	M	Inspector Comments: FS_ID:13323 EP_NO: 5296 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: Need to determine disposition of pipe, contact pipe owner if possible.5/16/2013 Same as last inspection. FIELD_STRUCT_DESC: 3-1/2-inch steel gas line through the levee, 3.0 feet below the crown. Bank rock revetted. (Permit No. 5296 - Atlantic Oil CO. 1966). FS Date: 5/16/2013 12:49:52 PM	39.113670 ° -121.768310 °	39.113670 ° -121.768310 °	99
								DWR ID: DWR_ST0010_01_f_2013_99		

* Location	** Rating	+ Issue Type
LS : Land Side	A : Acceptable	Ma : Maintenance Deficiency
WS : Water Side	N : Not Inspected/Rated	Ob : Design & System Obsolescence
CR : Crown	M : Minimally Acceptable	En : Enforcement
	U : Unacceptable	
	A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.66	10/23/2013 10/23/2013	Bob Duffey

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
7	1.20	1.20	Supplemental	DWR UCIP Field Study	WS	M En	Inspector Comments: FS_ID:6761 EP_NO: 1605 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No pump on Pier and power lines cut. Apparently abandoned-should be abandoned properly. FIELD_STRUCT_DESC: 18-inch steel irrigation pipe through the levee, 3.7 feet below the crown. Siphon breaker on the waterward slope. Pump on channel bank on steel structure. (App. 1605 - Schnable) Service pole at the waterward toe. Anchor in waterward slope. (App 1631-Schnable). FS Date: 10/9/2012 11:57:00 AM	39.127566 ° -121.755282 °	39.127566 ° -121.755282 °	100 Y
DWR ID: DWR_ST0010_01_f_2013_100										
8	1.20	1.20	Supplemental	DWR UCIP Field Study	WS	M En	Inspector Comments: FS_ID:6760 EP_NO: 1605 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No pump on Pier and poer lines cut. Apparently abandoned-should be abandoned properly. FIELD_STRUCT_DESC: 18-inch steel irrigation pipe through the levee, 3.7 feet below the crown. Siphon breaker on the waterward slope. Pump on channel bank on steel structure. (App. 1605 - Schnable) Service pole at the waterward toe. Anchor in waterward slope. (App 1631-Schnable). FS Date: 10/9/2012 11:57:48 AM	39.127566 ° -121.755282 °	39.127566 ° -121.755282 °	101
DWR ID: DWR_ST0010_01_f_2013_101										
9	1.20	1.20	Supplemental	DWR UCIP Field Study	WS	M En	Inspector Comments: FS_ID:13324 EP_NO: 1605 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: No pump on Pier and power lines cut. Apparently abandoned-should be abandoned properly.5/16/2013 Same as last inspection. FIELD_STRUCT_DESC: 18-inch steel irrigation pipe through the levee, 3.7 feet below the crown. Siphon breaker on the waterward slope. Pump on channel bank on steel structure. (App. 1605 - Schnable) Service pole at the waterward toe. Anchor in waterward slope. (App 1631-Schnable). FS Date: 5/16/2013 12:50:51 PM	39.127566 ° -121.755282 °	39.127566 ° -121.755282 °	102
DWR ID: DWR_ST0010_01_f_2013_102										
10	1.74	1.74	Supplemental	USACE Erosion Survey	WS	M Ma	Inspector Comments: 2011 - Whole bank is starting to unravel, with failure from poor soils. 2012: Site is part of the extended inventory, last inspected 2011. [2012 Site ID: WAD_2-1_L]	39.141757 ° -121.742939 °	39.133887 ° -121.749526 °	6
DWR ID:										
11	1.85	1.85	Earthen Levee	Erosion / Bank Caving	WS	M Ma	E1 : Note and monitor erosion site.	39.135110 ° -121.748230 °	39.135110 ° -121.748230 °	107 Y
DWR ID: DWR_ST0010_01_f_2013_107										

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.66	10/23/2013 10/23/2013	Bob Duffey

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
12	1.85	1.85	Earthen Levee	Animal Control	WS Ma	M	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.135110 ° -121.748229 °	39.135110 ° -121.748229 °	106 Y
DWR ID: DWR_ST0010_01_f_2013_106										
13	1.85	1.85	Supplemental	DWR UCIP Field Study	WS En	U	Inspector Comments: FS_ID:6747 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: Pipe abandoned. Pipe open and not plugged. Pipe should be removed or abandoned properly. Extensive animal burrowing occurring along pipe alignment. FIELD_STRUCT_DESC: 14-inch steel irrigation pipe through the levee, 5.7 feet below the crown. Siphon breaker on landward side. Vertical pump on waterward side. Meter pole on berm. Originally in O+M manual, asbuilt available. FS Date: 10/9/2012 11:25:35 AM	39.135091 ° -121.748196 °	39.135091 ° -121.748196 °	103 Y
DWR ID: DWR_ST0010_01_f_2013_103										
14	1.85	1.85	Supplemental	DWR UCIP Field Study	WS En	U	Inspector Comments: FS_ID:13329 EP_NO: N/A Repair Type: Urgent Crossing Status: Found UCIP Comments: Pipe abandoned. Pipe open and not plugged. Pipe should be removed or abandoned properly. Extensive animal burrowing occurring along pipe alignment. 5/16/2013 Same as last inspection. Steve Beckley is looking into finding pipe owner to properly abandon pipe. FIELD_STRUCT_DESC: 14-inch steel irrigation pipe through the levee, 5.7 feet below the crown. Siphon breaker on landward side. Vertical pump on waterward side. Meter pole on berm. Originally in O+M manual, asbuilt available. FS Date: 5/16/2013 12:56:42 PM	39.135091 ° -121.748196 °	39.135091 ° -121.748196 °	104 Y
DWR ID: DWR_ST0010_01_f_2013_104										
15	2.40	2.40	Earthen Levee	Erosion / Bank Caving	WS Ma	M	E2 : Schedule repair of erosion site prior to the next inspection.	39.141697 ° -121.742819 °	39.141697 ° -121.742819 °	14 Y
DWR ID: DWR_ST0010_01_s_2012_14										
16	2.43	2.43	Supplemental	USACE Erosion Survey	WS Ma	M	Inspector Comments: 2010 - Over steepened levees, some slumping, reach-wide problem. 2011 - Still a reach-wide problem. 2012: Site is part of the extended inventory, last inspected 2011. [2012 Site ID: WAD_2-4_L]	39.153095 ° -121.734390 °	39.142235 ° -121.742609 °	7 Y
DWR ID:										
17	2.76	2.76	Earthen Levee	Erosion / Bank Caving	WS Ma	M	E1 : Note and monitor erosion site.	39.146063 ° -121.739288 °	39.146063 ° -121.739288 °	1 Y
DWR ID: DWR_ST0010_01_s_2012_1										
18	3.31	3.31	Earthen Levee	Erosion / Bank Caving	WS Ma	C	E2 : Schedule repair of erosion site prior to the next inspection.	39.152875 ° -121.734320 °	39.152875 ° -121.734320 °	13 Y
DWR ID: DWR_ST0010_01_s_2012_13										

* Location	** Rating	+ Issue Type
LS : Land Side	A : Acceptable	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	En : Enforcement
	N : Not Inspected/Rated	
	C : Corrected	
	A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.66	10/23/2013 10/23/2013	Bob Duffey

LMR No.	Levee Mile		Category	Item	Location *	Rating ** +	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	
19	3.32	3.32	Supplemental	DWR UCIP Field Study	WS	M En	Inspector Comments: FS_ID:16730 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 5/16/2013 Unknown permit for work FIELD_STRUCT_DESC: FS Date: 8/1/2013 12:01:43 PM	39.153000 ° -121.734146 °	39.153000 ° -121.734146 °	105
DWR ID: DWR_ST0010_01_f_2013_105										
20	3.56	3.59	Earthen Levee	Erosion / Bank Caving	WS	M Ma	E1 : Note and monitor erosion site.	39.156225 ° -121.732930 °	39.156639 ° -121.732755 °	3 Y
DWR ID: DWR_ST0010_01_s_2012_3										
21	3.68	3.68	Earthen Levee	Erosion / Bank Caving	WS	M Ma	E1 : Note and monitor erosion site.	39.157861 ° -121.732238 °	39.157861 ° -121.732238 °	4 Y
DWR ID: DWR_ST0010_01_s_2012_4										
22	4.27	4.27	Earthen Levee	Erosion / Bank Caving	WS	M Ma	E1 : Note and monitor erosion site.	39.165845 ° -121.728877 °	39.165845 ° -121.728877 °	5
DWR ID: DWR_ST0010_01_s_2012_5										

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.66	10/23/2013 10/23/2013	Bob Duffey

Levee Mile Report Line	7
Start Levee Mile	1.20
End Levee Mile	1.20
Location	Water Side
Category	Supplemental
Item	DWR UCIP Field Study

Power pole with cut powerlines, pump missing from steel pier.

UCIP_2932.jpg



Levee Mile Report Line	11
Start Levee Mile	1.85
End Levee Mile	1.85
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of the erosion along both sides of the abandoned pump.

rduffey_f_20131104_118.JPG



Levee Mile Report Line	12
Start Levee Mile	1.85
End Levee Mile	1.85
Location	Water Side
Category	Earthen Levee
Item	Animal Control

View of the rodent holes under the irrigation pipe.

rduffey_f_20131104_119.JPG



*** Location**

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+ Issue Type

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.66	10/23/2013 10/23/2013	Bob Duffey

Levee Mile Report Line	13
Start Levee Mile	1.85
End Levee Mile	1.85
Location	Water Side
Category	Supplemental
Item	DWR UCIP Field Study

Pump missing from steel pier on WS toe.

UCIP_2925.jpg



Levee Mile Report Line	15
Start Levee Mile	2.40
End Levee Mile	2.40
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of the erosion along the fences.

rduffey_f_20130919_844.jpg



Levee Mile Report Line	17
Start Levee Mile	2.76
End Levee Mile	2.76
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of erosion along W/S toe.

rduffey_f_20130919_840.jpg



* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Wadsworth Canal	Left	4.66	10/23/2013 10/23/2013	Bob Duffey

Levee Mile Report Line	20
Start Levee Mile	3.56
End Levee Mile	3.59
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of the erosion along the waterside toe of the levee.

rduffey_f_20130919_841.jpg



Levee Mile Report Line	21
Start Levee Mile	3.68
End Levee Mile	3.68
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of the erosion along the waterside toe of the levee.

rduffey_f_20130919_842.jpg



* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Fall 2013 Levee Inspection Results

Sutter Maintenance Yard Wadsworth Canal

Waterway			Bank	Unit Miles
Unit No. 02 Wadsworth Canal			Right	4.66
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M	
Date of Inspection	03/21/2013 - 03/21/2013		10/23/2013 - 10/23/2013	
DWR Inspector	Bob Duffey		Bob Duffey	
Accompanied By	Steve Beckley Sutter Maintenance Yard		Steve Beckley Sutter Maintenance Yard	

Summer & Winter Inspections

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DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
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The LMA should submit this information to DWR using the LMA web application tool available at:

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.66	10/23/2013 10/23/2013	Bob Duffey

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
1	0.02	0.02	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:6822 EP_NO: 5296 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: Unable to locate any signage. Call owner to determine disposition of pipeline. FIELD_STRUCT_DESC: 3-1/2-inch steel gas line through levee, 30-inches below crown. (App. 5296 - Atlantic Oil Co.). FS Date: 10/10/2012 8:32:56 AM	39.114372 ° -121.769263 °	39.114372 ° -121.769263 °	9
DWR ID: DWR_ST0010_02_f_2013_9										
2	0.02	0.02	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:13336 EP_NO: 5296 Repair Type: Non-Urgent Crossing Status: Not Found UCIP Comments: Unable to locate any signage. Call owner to determine disposition of pipeline.5/16/2013 Same as last inspection. FIELD_STRUCT_DESC: 3-1/2-inch steel gas line through levee, 30-inches below crown. (App. 5296 - Atlantic Oil Co.). FS Date: 5/16/2013 1:17:35 PM	39.114372 ° -121.769263 °	39.114372 ° -121.769263 °	17
DWR ID: DWR_ST0010_02_f_2013_17										
3	0.78	0.78	Earthen Levee	Animal Control	LS	C Ma	A1 : Exterminate rodents and backfill and compact or grout burrows.	39.123115 ° -121.760723 °	39.123115 ° -121.760723 °	10
DWR ID: DWR_ST0010_02_f_2012_10										
4	1.15	1.15	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:6821 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe appears improperly abandoned. No motor present, electrical equipment is stripped. Heavy rodent activity along pipe WS and LS. Pipe needs to be removed or properly abandoned. FIELD_STRUCT_DESC: 10-inch steel irrigation pipe through the levee, 4.8-feet below the crown. Pump mounted on concrete pad near canal bank. Service pole on berm. 30-inch diameter concrete standpipe at landward toe. Originally in O+M manual, asbuilt available. FS Date: 10/10/2012 8:27:19 AM	39.127487 ° -121.756485 °	39.127487 ° -121.756485 °	18
DWR ID: DWR_ST0010_02_f_2013_18										

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.66	10/23/2013 10/23/2013	Bob Duffey

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
5	1.15	1.15	Supplemental	DWR UCIP Field Study	WS	M En	Inspector Comments: FS_ID:13337 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe appears improperly abandoned. No motor present, electrical equipment is stripped. Heavy rodent activity along pipe WS and LS. Pipe needs to be removed or properly abandoned. 5/16/2013 Same as last inspection. FIELD_STRUCT_DESC: 10-inch steel irrigation pipe through the levee, 4.8-feet below the crown. Pump mounted on concrete pad near canal bank. Service pole on berm. 30-inch diameter concrete standpipe at landward toe. Originally in O+M manual, asbuilt available. FS Date: 5/16/2013 1:18:14 PM	39.127487 ° -121.756485 °	39.127487 ° -121.756485 °	19 Y
DWR ID: DWR_ST0010_02_f_2013_19										
6	1.17	1.17	Earthen Levee	Slope Stability	LS	M Ma	S3 : Repair the levee slope damaged by vehicle traffic and prevent access where possible.	39.127648 ° -121.756345 °	39.127648 ° -121.756345 °	3 Y
DWR ID: DWR_ST0010_02_s_2012_3										
7	1.72	1.72	Earthen Levee	Animal Control	WSA/W	Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.133945 ° -121.750250 °	39.133945 ° -121.750250 °	15 Y
DWR ID: DWR_ST0010_02_f_2012_15										
8	1.74	1.74	Supplemental	USACE Erosion Survey	WS	M Ma	Inspector Comments: 2011 - Whole bank is starting to unravel, with failure from poor soils. 2012: Site is part of the extended inventory, last inspected 2011. [2012 Site ID: WAD_2-1_R]	39.141814 ° -121.743260 °	39.134064 ° -121.749781 °	12
DWR ID:										
9	1.77	1.77	Supplemental	DWR UCIP Field Study	WS	M En	Inspector Comments: FS_ID:6801 EP_NO: 1096 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Heavy rodent activity on LS slope along pipe alignment. FIELD_STRUCT_DESC: 16-inch steel irrigation pipe through the levee, 4.4-feet below the crown. Pump mounted on a steel structure on the bank. Siphon breaker on the landward slope. unable to locate 48-inch concrete standpipe on the landward berm that was listed in permit. (Permit No. 1096 - Brown). Asbuilt available. FS Date: 10/10/2012 2:36:22 PM	39.134497 ° -121.749716 °	39.134497 ° -121.749716 °	20
DWR ID: DWR_ST0010_02_f_2013_20										

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.66	10/23/2013 10/23/2013	Bob Duffey

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
10	1.77	1.77	Supplemental	DWR UCIP Field Study	WS	M En	Inspector Comments: FS_ID:13342 EP_NO: 1096 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Heavy rodent activity on LS slope along pipe alignment.5/16/2013 Same as last inspection. FIELD_STRUCT_DESC: 16-inch steel irrigation pipe through the levee, 4.4-feet below the crown. Pump mounted on a steel structure on the bank. Siphon breaker on the landward slope. unable to locate 48-inch concrete standpipe on the landward berm that was listed in permit. (Permit No. 1096 - Brown). Asbuilt available. FS Date: 5/16/2013 1:20:47 PM	39.134497 ° -121.749716 °	39.134497 ° -121.749716 °	21 Y
DWR ID: DWR_ST0010_02_f_2013_21										
11	1.77	1.77	Earthen Levee	Animal Control	LS	M Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.134490 ° -121.749716 °	39.134490 ° -121.749716 °	11 Y
DWR ID: DWR_ST0010_02_f_2012_11										
12	1.77	1.77	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:6802 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Heavy rodent activity along LS alignment of pipe. No pump on structure and it appears to be abandoned. Should be abandoned properly. FIELD_STRUCT_DESC: 16-inch steel irrigation pipe through the levee, 4.4-feet below the crown. Pump mounted on a timber structure on the bank. Siphon breaker on the landward slope. Unable to locate 48-inch concrete standpipe on the landward berm that was listed in O+M manual. Asbuilt available. FS Date: 10/10/2012 2:44:20 PM	39.134499 ° -121.749712 °	39.134499 ° -121.749712 °	22
DWR ID: DWR_ST0010_02_f_2013_22										
13	1.77	1.77	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:13343 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Heavy rodent activity along LS alignment of pipe. No pump on structure and it appears to be abandoned. Should be abandoned properly.5/16/2013 Same as last inspection. FIELD_STRUCT_DESC: 16-inch steel irrigation pipe through the levee, 4.4-feet below the crown. Pump mounted on a timber structure on the bank. Siphon breaker on the landward slope. Unable to locate 48-inch concrete standpipe on the landward berm that was listed in O+M manual. Asbuilt available. FS Date: 5/16/2013 1:21:18 PM	39.134499 ° -121.749712 °	39.134499 ° -121.749712 °	23
DWR ID: DWR_ST0010_02_f_2013_23										
14	1.86	1.86	Earthen Levee	Animal Control	LS	C Ma	A1 : Exterminate rodents and backfill and compact or grout burrows.	39.135535 ° -121.748678 °	39.135535 ° -121.748678 °	8
DWR ID: DWR_ST0010_02_s_2012_8										

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.66	10/23/2013 10/23/2013	Bob Duffey

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No. Photo
	Start	End						Start	End	

15	2.44	2.44	Supplemental	USACE Erosion Survey	WS	M Ma	Inspector Comments: 2010 - Over steepened levees, some slumping, reach-wide problem. 2011 - Still a reach-wide problem. 2012: Site is part of the extended inventory, last inspected 2011. [2012 Site ID: WAD_2-4_R]	39.153150 ° -121.734611 °	39.142254 ° -121.742847 °	13
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DWR ID:

16	3.30	3.30	Earthen Levee	Erosion / Bank Caving	LS	M Ma	E1 : Note and monitor erosion site.	39.152903 ° -121.734906 °	39.152903 ° -121.734906 °	14 Y
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DWR ID: DWR_ST0010_02_s_2012_14

17	3.33	3.33	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:16731 EP_NO: N/A Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: 5/16/2013 Unkown permit for work FIELD_STRUCT_DESC: FS Date: 8/1/2013	39.153229 ° -121.734988 °	39.153229 ° -121.734988 °	24
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DWR ID: DWR_ST0010_02_f_2013_24

18	3.35	3.35	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:6783 EP_NO: 10473 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe shows signs of heavy rust at outlet in channel. Good candidate for video inspection. FIELD_STRUCT_DESC: 16-inch steel, irrigation pipe through the levee, 2.7-feet below the crown. Vertical pump in the channel with a service pole on the berm. Discharges into channel at the landward toe of the levee. (App. 5622 & 10473). Originally included in O+M Manual As-built available. FS Date: 10/10/2012 1:06:47 PM	39.153491 ° -121.734636 °	39.153491 ° -121.734636 °	25
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DWR ID: DWR_ST0010_02_f_2013_25

19	3.35	3.35	Supplemental	DWR UCIP Field Study	LS	M En	Inspector Comments: FS_ID:13347 EP_NO: 10473 Repair Type: Non-Urgent Crossing Status: Found UCIP Comments: Pipe shows signs of heavy rust at outlet in channel. Good candidate for video inspection. 5/16/2013 Same as last inspection. FIELD_STRUCT_DESC: 16-inch steel, irrigation pipe through the levee, 2.7-feet below the crown. Vertical pump in the channel with a service pole on the berm. Discharges into channel at the landward toe of the levee. (App. 5622 & 10473). Originally included in O+M Manual As-built available. FS Date: 5/16/2013 1:25:58 PM	39.153491 ° -121.734636 °	39.153491 ° -121.734636 °	26 Y
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DWR ID: DWR_ST0010_02_f_2013_26

* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.66	10/23/2013 10/23/2013	Bob Duffey

LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	
20	3.35	3.35	Supplemental	DWR UCIP Field Study	WS	U En	Inspector Comments: FS_ID:13349 EP_NO: 5622 Repair Type: Urgent Crossing Status: Found UCIP Comments: 5/16/2013 Signs of leaks near concrete stand pipe on LS toe-road. Area about 20ft. long is muddy and there has not been any rain for a few weeks. FIELD_STRUCT_DESC: 15-inch steel irrigation pipe through the levee, 2.7-feet below the crown. Vertical pumps in the channel (likely sleeved through a 22-inch steel pipe). Power pole on the WS slope. Discharges into 36-inch concrete standpipe at the landward toe of the levee. 16-inch CMP riser on LS shoulder. (Permit No. 5622 & 10473). Originally included in O+M Manual As-built available. FS Date: 5/16/2013 1:38:39 PM	39.153530 ° -121.734620 °	39.153530 ° -121.734620 °	27 Y
DWR ID: DWR_ST0010_02_f_2013_27										
21	3.35	3.35	Supplemental	DWR UCIP Field Study	WS	U En	Inspector Comments: FS_ID:13348 EP_NO: 5622 Repair Type: Urgent Crossing Status: Found UCIP Comments: 5/16/2013 Signs of leaks near concrete stand pipe on LS toe-road. Area about 20ft. long is muddy and there has not been any rain for a few weeks. FIELD_STRUCT_DESC: 15-inch steel irrigation pipe through the levee, 2.7-feet below the crown. Vertical pumps in the channel (likely sleeved through a 22-inch steel pipe). Power pole on the WS slope. Discharges into 36-inch concrete standpipe at the landward toe of the levee. 16-inch CMP riser on LS shoulder. (Permit No. 5622 & 10473). Originally included in O+M Manual As-built available. FS Date: 5/16/2013 1:27:01 PM	39.153530 ° -121.734620 °	39.153530 ° -121.734620 °	28
DWR ID: DWR_ST0010_02_f_2013_28										
22	3.46	3.46	Earthen Levee	Erosion / Bank Caving	WS	M Ma	E1 : Note and monitor erosion site.	39.155057 ° -121.733985 °	39.155057 ° -121.733985 °	4 Y
DWR ID: DWR_ST0010_02_s_2012_4										
23	3.59	3.99	Earthen Levee	Erosion / Bank Caving	WS	M Ma	E1 : Note and monitor erosion site.	39.156753 ° -121.733267 °	39.162113 ° -121.730997 °	5 Y
DWR ID: DWR_ST0010_02_s_2012_5										
24	4.41	4.41	Supplemental	USACE Erosion Survey	WS	M Ma	Inspector Comments: 2011 - Small erosion pocket. 2012: Site is part of the extended inventory, last inspected 2011. [2012 Site ID: WAD_4-3_R]	39.168937 ° -121.727905 °	39.168659 ° -121.728016 °	16
DWR ID:										
25	4.49	4.49	Earthen Levee	Erosion / Bank Caving	WS	M Ma	E1 : Note and monitor erosion site.	39.168848 ° -121.728130 °	39.168848 ° -121.728130 °	6 Y
DWR ID: DWR_ST0010_02_s_2012_6										
26	4.55	4.55	Earthen Levee	Erosion / Bank Caving	WSA/W	Ma	E1 : Note and monitor erosion site.	39.169670 ° -121.727787 °	39.169670 ° -121.727787 °	7 Y
DWR ID: DWR_ST0010_02_s_2012_7										

* Location	** Rating	+ Issue Type
LS : Land Side WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.66	10/23/2013 10/23/2013	Bob Duffey

Levee Mile Report Line	5
Start Levee Mile	1.15
End Levee Mile	1.15
Location	Water Side
Category	Supplemental
Item	DWR UCIP Field Study

Pipe and pump facilities on WS slope.

UCIP_7270.jpg



Levee Mile Report Line	6
Start Levee Mile	1.17
End Levee Mile	1.17
Location	Land Side
Category	Earthen Levee
Item	Slope Stability

View of vehicle erosion along L/S slope.

rduffey_f_20130919_067.jpg



Levee Mile Report Line	7
Start Levee Mile	1.72
End Levee Mile	1.72
Location	Water Side
Category	Earthen Levee
Item	Animal Control

View of the grouted rodent holes.

rduffey_f_20130919_078.JPG



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

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+ Issue Type

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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.66	10/23/2013 10/23/2013	Bob Duffey

Levee Mile Report Line	10
Start Levee Mile	1.77
End Levee Mile	1.77
Location	Land Side
Category	Supplemental
Item	DWR UCIP Field Study
Pump on steel platform with walkway on WS berm.	
UCIP_7277.jpg	



Levee Mile Report Line	11
Start Levee Mile	1.77
End Levee Mile	1.77
Location	Land Side
Category	Earthen Levee
Item	Animal Control
USACE 2011 Photo #1	
rduffey_f_20130919_074.jpg	



Levee Mile Report Line	11
Start Levee Mile	1.77
End Levee Mile	1.77
Location	Land Side
Category	Earthen Levee
Item	Animal Control
USACE 2011 Photo #2	
rduffey_f_20130919_075.jpg	

*** Location**

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WS : Water Side
CR : Crown

**** Rating**

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A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.66	10/23/2013 10/23/2013	Bob Duffey

Levee Mile Report Line	11
Start Levee Mile	1.77
End Levee Mile	1.77
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of the rodent holes above the irrigation pipe.

rduffey_f_20131104_113.JPG



Levee Mile Report Line	16
Start Levee Mile	3.30
End Levee Mile	3.30
Location	Land Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of the erosion along the W/S toe.

rduffey_f_20130919_077.jpg



Levee Mile Report Line	19
Start Levee Mile	3.35
End Levee Mile	3.35
Location	Land Side
Category	Supplemental
Item	DWR UCIP Field Study

Pump on steel pier at WS toe.

UCIP_7283.jpg



* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.66	10/23/2013 10/23/2013	Bob Duffey

Levee Mile Report Line	20
Start Levee Mile	3.35
End Levee Mile	3.35
Location	Water Side
Category	Supplemental
Item	DWR UCIP Field Study

Pump station in channel on WS

UCIP_7294.jpg



Levee Mile Report Line	22
Start Levee Mile	3.46
End Levee Mile	3.46
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of the erosion at the waterside toe of the levee.

rduffey_f_20130919_068.jpg



Levee Mile Report Line	23
Start Levee Mile	3.59
End Levee Mile	3.99
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of the erosion along the waterside toe.

rduffey_f_20130919_069.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

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M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Fall 2013

Sutter Maintenance Yard Wadsworth Canal

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Wadsworth Canal	Right	4.66	10/23/2013 10/23/2013	Bob Duffey

Levee Mile Report Line	25
Start Levee Mile	4.49
End Levee Mile	4.49
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of erosion along the W/S toe.

rduffey_f_20130919_070.jpg



Levee Mile Report Line	26
Start Levee Mile	4.55
End Levee Mile	4.55
Location	Water Side
Category	Earthen Levee
Item	Erosion / Bank Caving

View of the erosion along the W/S toe.

rduffey_f_20130919_071.jpg



* Location LS : Land Side WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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